



State of Utah  
Jon M. Huntsman, Jr.  
Governor



## Energy Overview

Utah experienced a significant increase in crude oil and natural gas production in 2007; however, coal production declined due to unexpected mine closures. Production of coal and natural gas continued to satisfy increasing demand, while crude oil production, despite its recent rebound, still accounted for only 36% of Utah's total petroleum product consumption. Increasing crude oil prices in Utah are related to world events and have been driven up by speculated shortages, foreign conflicts, and a lack of refinery capacity. Natural gas prices have decreased in recent years with a glut of new production in the Rocky Mountains and limited pipeline capacity impeding export to more profitable markets.

Crude oil production in Utah increased a remarkable 50% over the past four years, but in order to keep up with increasing demand, Utah had to import significant amounts of crude from other states and Canada. Production and consumption of natural gas and electricity both increased in 2007, reaching all-time highs in both categories. Coal production in Utah was down in 2007, while coal consumption, mainly at Utah's five coal-burning power plants, was near a record high.

The wellhead price of crude oil, as well as prices for motor gasoline and diesel, reached record highs in 2007, at least in nominal dollars. In contrast, the wellhead price of natural gas decreased 21% and the price for home-heating natural gas decreased 12%. The 2007 average cost of electricity in Utah remained well below the national average, mainly due to our reliance on Utah's low-cost coal-fired generation.

## 2007 Summary

### Petroleum

**Production.** Crude oil production in Utah has seen a substantial resurgence over the past four years with the discovery of the Covenant field in central Utah and increased exploration and drilling in the Uinta Basin. Crude oil production increased to 19.7 million barrels in 2007, up 10% from 2006, and up 50% from 2003. Total crude oil imports decreased by 2.4 million barrels in 2007, giving room at Salt Lake City refineries for more Utah oil. Of particular note, imports from Canada decreased from 11.1 million barrels in 2006 to 8.9 million barrels in 2007. Refinery receipts decreased slightly from a record-high 55.1 million barrels of crude oil in 2006 to 54.9 million barrels in 2007. Despite this small decrease, refineries are still working near capacity to keep up with demand for motor gasoline, diesel, and other petroleum products. The Holly refinery in Woods Cross is the only Utah refinery with plans for expansion. They plan to increase refining capacity by 15,000 barrels per day by the end of 2008, with further expansions planned for the future. Crude oil exports for 2007 totaled roughly 3.8 million barrels, down from 4.1 million barrels in 2006.

**Prices.** Military conflict in the Middle East, surging demand in Asia, and continuing worries of crude oil shortages have caused oil prices around the world to reach record highs, at least in nominal dollars. The price of Utah crude oil rose commensurately, averaging \$61.10 per barrel in 2007. This is 2.2% higher than in 2006, double the price seen in 2003, and nearly five times the average price of \$12.52 recorded in 1998. When the effect of inflation is taken into account, the 2007 price of Utah crude oil is the third highest in history behind 1981 (\$77.33) and 1982 (\$65.08). This recent increase in crude oil price has translated into a significant increase in motor gasoline and diesel prices. The average 2007 price of regular unleaded motor gasoline in Utah increased 9.6% to \$2.73 per gallon and is more than double the average price from 2002.

**Consumption.** Utah refinery production increased 2.1% in 2007 to a record high of 66.2 million barrels, partly to help offset lower petroleum product imports via the Pioneer pipeline. Similarly, Utah's total petroleum product consumption increased by 2.4% in 2007 to 54.6 million barrels. Despite record high prices, motor gasoline and distillate fuel consumption continued to increase. Utah refineries exported 22.5 million barrels of petroleum products via pipeline to other states in 2007, down 3.3% from the year before. Utah exports will soon increase as plans for a petroleum product pipeline from Salt Lake City to Las Vegas are in the planning stages.

### Natural Gas

**Production.** Natural gas production in Utah has also seen a substantial surge in the past few years as drilling in the Uinta Basin has significantly increased. Utah produced a record-high 396.8 billion cubic feet of natural gas in 2007, 11% more than in 2006. Marketed production and actual natural gas sales also reached record highs at 384.9 and 354.2 billion cubic feet, respectively. Roughly 21% of natural gas production was from coalbed methane wells, but this percentage is decreasing as numerous new conventional wells are drilled in the Uinta Basin and existing coalbed methane wells have declining production rates.

**Prices.** The average wellhead price for natural gas in Utah decreased 21%, from \$5.70 per thousand cubic feet in 2006 to \$4.50 in 2007. This significant decrease was the result of increased production and limited pipeline capacity. The new Rockies Express Pipeline, with expected completion scheduled for winter of 2008, will enable Rocky Mountain natural gas to reach markets in the eastern United States. This "connecting-of-markets" is expected to increase the price of Utah's natural gas, matching higher prices in the east. Decreases in the natural gas wellhead price in 2006 and 2007 translated into a 12% decrease in the residential natural gas price, which averaged \$9.73 per thousand cubic feet in 2007.

**Consumption.** Natural gas consumption in Utah increased by 9.0% to a record-high 204.3 billion cubic feet in 2007. The vast majority of that increase occurred in the electric utility sector where consumption rose 46% to 42.4 billion cubic feet of natural gas as two new natural gas power plants came online in late 2006. Natural gas consumed for power generation has increased ten-fold over the past 10 years as concerns over emissions have utilities favoring the construction of gas-fired power plants to provide quick-start peaking capacity, as well as supplying more baseload capacity. Natural gas consumption in the residential sector increased by 2.1% as Utah households consumed a record-high 61.3 billion cubic feet in 2007. Industrial use of natural gas increased by 8.7% in 2007 to 31.6 billion cubic feet, but is still well below peak industrial consumption of 45.5 billion cubic feet reached in 1998. Utah consumes 53% of in-state production, making Utah a net exporter of natural gas.

## Coal

**Production.** Utah coal production decreased 9.6% in 2007 to 23.6 million short tons. This decrease was the result of the unexpected closure of the Crandall Canyon mine, idling of the Aberdeen (Tower) mine over safety concerns, and less than expected production at SUFCO, Horizon, and Bear Canyon. Lower production also led to a decrease in coal distribution, which totaled 24.0 million short tons in 2007, and resulted in a small increase in coal imports. Two newly proposed coal mines are in various stages of the permitting process: the Lila Canyon mine, located in the southern part of the Book Cliffs coal field, and the Coal Hollow mine, located in the Alton coal field in Southern Utah's Kane County.

**Prices.** The average mine-mouth price for Utah coal increased to \$23.62 per short ton in 2007 from \$22.51 in 2006. Conversely, the spot price for coal in Utah has decreased \$12.00 in the last year from \$36.00 per short ton to only \$24.00. This spot market downturn may affect Utah's mine-mouth price, but overall high energy prices and possible shortages due to mine closures will most likely keep prices relatively stable. The end-use price of coal at Utah electric utilities increased 5.7% to \$29.50 per short ton in 2007.

**Consumption.** Nearly 17.5 million short tons of coal were consumed in Utah in 2007, 95% of which was burned at electric utilities. Because demand for electricity increases with increased population, demand for Utah coal will continue to be strong. Coke consumption in Utah ended in 2002 when Geneva Steel went out of business, and coal sales for industry, business, and home use have declined through the years as consumers opt for the convenience of natural gas. Utah is a net exporter of coal, with 8.9 million short tons going to other states in 2007, about the same as in 2006, but much lower than peak exports of 15.1 million short tons delivered in 1996.

## Electricity

**Production.** Electricity generation in Utah increased to an all-time high of 44,856 gigawatthours (GWh) in 2007, up 8.7% from the year before. The vast majority, 83%, came from coal-burning power plants; however, electric generation from natural gas plants has increased its share of total generation to 15%, five times greater than just two years ago. Petroleum accounted for 0.1%, while renewable resources, mostly hydroelectric and geothermal, provided 2.1% of Utah's total electric generation. Wind energy will soon be included in Utah's electric generation portfolio as the state's first commercial wind farm comes online in mid-2008. This farm, at the mouth of Spanish Fork Canyon, will consist of nine, 2.1 megawatt (MW) turbines, for a total capacity of 18.9 MW.

**Prices.** Electricity prices for all sectors in Utah increased 6.8% in 2007, based mostly on higher than average end-use coal prices. Utah's 2007 average electric rate of 6.4 cents per kilowatthour (kWh) for all sectors of the economy is 30% lower than the national average of 9.1 cents. This is due in part to Utah's relatively cheap and abundant coal, which supplies 83% of electricity generation in the state. The residential price of Utah's electricity increased 8.0% in 2007 to 8.2 cents per kWh, but is also much lower than the national average of 10.5 cents per kWh.

**Consumption.** Electricity consumption in Utah increased 5.2% in 2007 to 27,746 GWh, a new record high. Residential, commercial, and industrial demand increased 5.3%, 5.9%, and 4.3% respectively.

## Conclusion and Outlook for Utah Energy

**Production and Consumption.** Despite recent increases in crude oil production, Utah will continue to be dependent on other states and Canada for crude oil and petroleum products as current Utah production meets only one-third of in-state demand. Conversely, Utah will produce much more natural gas than it consumes, allowing roughly half of total production to be exported out-of-state. Coal production, despite 2007's decrease, should continue at a steady pace, as demand remains high, especially from the electric utility sector. Utah also produces more coal than it uses, allowing 38% of production to be shipped to other states. Electricity generation will continue to increase as new electric plants come online to meet growing demand, and Utah's renewable energy capacity will gradually increase as technology improves and governmental subsidies designed to encourage development are implemented.

**Prices.** Utah crude oil reached a new record-high nominal price of \$61.10 per barrel in 2007, while the price of natural gas decreased for the second straight year to \$4.50 per thousand cubic feet. With increasing demand, worldwide supply constraints, refining and transportation bottlenecks, and insta-

bility in many oil-producing countries, prices should continue to be volatile and remain above historical averages. With regard to electricity, the abundance of relatively low-cost Utah coal will assure affordable, reliable electric power in Utah for the foreseeable future and help keep Utah's electricity prices well below the national average.

### Minerals Overview

The gross production value (in inflation-adjusted dollars) of all energy and mineral commodities produced in Utah in 2007 totaled \$7.7 billion, about \$400 million less than the all-time high of \$8.1 billion established in 2006. The previous peak of \$5.1 billion in 1981 was largely due to the rise in the price of oil at that time. The 2007 value is mostly due to higher prices of crude oil and metals rather than increased production.

The Utah Geological Survey (UGS) estimated that the nominal value of mineral production (excluding oil and gas) in Utah was \$4.76 billion in 2007. This is approximately \$60 million higher than the \$4.70 billion for 2006. This increase is due mostly to higher base- and precious-metal prices and increased industrial mineral production. Industrial-mineral production reached another all-time high in 2007, as a result of both increased production and commodity prices. Increased metal prices over the past three years have led to the development of one new base metal mine (copper), the re-opening of one uranium mine, and the announcement of plans to restart an inactive iron mine.

In mid-November 2007, the Utah Division of Oil, Gas and Mining (DOGM) listed 98 active (including coal) Large Mine permits (five acres and larger disturbance) and 170 active Small Mine permits (less than five acres disturbance), compared to 105 active Large Mine and 161 Small Mine permits in 2006. From January 1 through mid-November 2007, DOGM received two new and approved 11 other new Large Mine permit applications and received 31 and approved 21, (including 10 new) Small Mine permit applications. Both of the Large Mine applications were for new mines as opposed to expanding from Small Mine permits. By mid-November DOGM approved 1,355 Applications to Drill (APDs) for oil and gas, about 70% of which were for natural gas. A record 2,061 APDs were approved in 2006. Mineral exploration activity in Utah is at a modern day high with approximately 11,500 new mineral claims being staked in 2007.

The U.S. Geological Survey (USGS) ranked Utah fourth among all states in the value of nonfuel mineral production for 2006, with an estimated value of \$4.0 billion. Based on tonnage reported by the U.S. Energy Information Agency, Utah ranked 12th in coal production in 2006 (up from 14th in 2005). In addition, Utah ranked 10th in natural gas production and 12th in crude oil production. The USGS also reported that Utah contributed about 6.2% of the U.S. total value of nonfuel minerals production in 2006 (up from 5.6% in 2005). Utah's non-

fuel mineral ranking should remain the same in 2007, although the coal ranking could fall because of recent mine closures.

Operator surveys indicate that both precious-metal and base-metal production for 2008 should increase moderately. Industrial-mineral production reached another all-time high in 2007, and is projected to increase again in 2008. A large part of industrial-minerals production will be affected primarily by the level of construction activity along the Wasatch Front and in surrounding states. Coal production and coal prices are forecast to increase in 2008. Indications are that metal prices will remain relatively high in 2008, but some moderation may occur in select metals and mineral commodities. Natural gas and crude oil production is likely to increase in 2008 as many new wells are completed and put into production.

### 2007 Summary

The value of Utah's mineral production in 2007 was estimated to be \$4.76 billion, an increase of about \$60 million (1.3%) from 2006. Estimated contributions from each of the major industry sectors for 2007 are as follows:

Base-metals	\$3.0 billion (63% of total)
Industrial-minerals	\$874 million (18% of total)
Coal	\$557 million (12% of total)
Precious-metals	\$327 million (7% of total)

### Base-Metals

Base-metal production, valued at approximately \$3.0 billion, was the largest contributor to the value of minerals produced in 2007, accounting for 63% of the total value of minerals produced. The value of base-metals increased approximately \$134 million (5%) in 2007, due primarily to increases in the price of all base-metals and increased production of magnesium metal. In descending order of value, base-metal mines produced copper, molybdenum, magnesium, and beryllium. These metals were produced by Kennecott Utah Copper Company (copper and molybdenum) from one mine in Salt Lake County, Lisbon Valley Mining Company (copper) from a relatively new mine in San Juan County, US Magnesium, LLC (magnesium) from its electrolytic facility in Tooele County using brines from the Great Salt Lake, and Brush Resources, Inc. (beryllium) from one mine in Millard County.

### Industrial-Minerals

Industrial-mineral production (including sand and gravel), valued at approximately \$874 million, was the second-largest contributor to the value of minerals produced in 2007 and accounted for approximately 18% of the total value of minerals produced (down from 22% in 2005). In contrast to the relatively few (five) Large Mines and facilities that produce base- and precious-metals, there were approximately 51 active Large Mines and brine-processing facilities and 37 Small Mines that produced a myriad of industrial-mineral commodities and

products in 2006. The above number of Large and Small Mines does not include the more than 120 sand and gravel operations that are spread throughout the state. The estimated value of industrial-minerals increased approximately \$63 million (8%) compared to 2006, due primarily to increased values of sand, gravel, and crushed stone, salines, and hydrated lime and quicklime. Overall, most industrial-mineral unit prices increased modestly during the year.

The five most valuable commodities or groups of commodities produced, in descending order of value, were 1) construction sand, gravel, and crushed stone, 2) salines, including salt, potash (potassium chloride), sulfate of potash (potassium sulfate), and magnesium chloride, 3) Portland cement, 4) lime, including quicklime and hydrated lime, and 5) phosphate. Together, these commodities contributed 90% of the total value of industrial-minerals produced in Utah in 2007, about 1% more than in 2006.

### **Coal**

Approximately 23.6 million tons of high-Btu, low-sulfur coal, valued at \$557 million, was produced from 13 mines operated by eight companies in 2007. These mines are located in Carbon, Emery, and Sevier Counties. Coal was the third-largest contributor to the value of minerals produced in 2007, and accounted for 12% of the total value of minerals produced. The value of coal decreased about \$30 million (5%), due to a mine disaster in early August that permanently closed one mine and subsequently led to the temporary closing of a second mine. Coal prices, which have been steadily rising for the past three years, increased about 5% in 2007 and are expected to increase again in 2008. No new coal mines opened during the year, although several new mines are being planned and one mine is being permitted.

### **Precious-Metals**

Precious-metals were valued at \$327 million in 2007, and accounted for approximately 7% of the total value of nonfuel minerals produced. The value of precious-metal production was attributed to gold (85%) and silver (15%). Precious-metal values decreased approximately \$73 million (18%) compared to 2006 due to decreased production of both metals, despite higher prices of both gold and silver (11% and 19%, respectively). The two main producers of precious-metals were Kennecott's Bingham Canyon mine, which recovers both silver and gold as by-products of copper production, and Kennecott's Barneys Canyon mine, which is a primary gold producer. The Bingham Canyon and Barneys Canyon mines are located in western Salt Lake County. The Barneys Canyon mine is in its final stage of heap-leach operation and is projected to end gold production in 2008.

### **Active Mines and New Mine Permits**

As of mid-November 2007, DOGM listed 98 active Large

Mines and 170 active Small Mines (excluding sand and gravel). DOGM has not yet received production reports for 2007. In 2006, 68 Large Mines and 52 Small Mines reported production, compared to 69 Large Mines and 65 Small Mines in 2005. The Large Mines reporting production in 2006, grouped by industry sector, were industrial minerals (50), base-metals (4), precious-metals (1), and coal (13). The Small Mines reporting production in 2006, grouped by industry sector, were industrial-minerals (37), precious-metals (5), base-metals (1), and gemstones, fossils, geodes, and other (9).

Through mid-November 2007, DOGM received two new Large Mine permit applications and 31 new Small Mine permit applications. These numbers represent a decrease of three Large Mine permit applications and a decrease of 10 Small Mine permit applications compared to 2006. Both of the Large Mine applications were for industrial-mineral operations. New Small Mine applications included 20 for industrial-minerals, six for precious-metals, and five for energy-minerals (uranium).

The number of Notices of Intent (NOI) to explore on public lands increased significantly in 2007. Forty-four NOIs were filed with DOGM through mid-November 2007, compared to 35 for all of 2006 and 27 for 2005. The 2007 NOIs included 31 for energy minerals (uranium and oil shale), three for industrial-minerals, six for precious-metals, and four for base-metals.

### **Nonfuel Mineral Production Trends**

During the past three years, substantial increases in metal and mineral commodity prices and increased metals and industrial-mineral production led to higher nonfuel mineral values. Mineral values will remain relatively high, and may be higher in 2008 as the international, national, and regional demand for minerals continues to grow. According to preliminary data from the USGS, the value of Utah's nonfuel mineral production in 2006 was \$4.0 billion, an increase of \$1.1 billion (43%) from 2005. This follows a 48% increase from 2004 to 2005. Nationally, Utah ranked fourth in 2006 (same as in 2005) in the value of nonfuel mineral production, accounting for approximately 6.2% of the U.S. total. USGS data show that during the period from 1997 through 2006, the value of nonfuel mineral production in Utah ranged from a low of \$1.2 billion (2002) to a high of \$4.0 billion (2006). The UGS estimated the value of nonfuel mineral production for 2007 at \$4.2 billion, 3% higher than its nonfuel mineral production estimate of \$4.1 billion for 2006.

### **Significant Issues Affecting Utah's Mining Industry**

Significant issues that will impact the mineral industry in Utah include the potential for carbon emission taxation, proposed changes to the Mining Law of 1872 that will add royalty provisions for locatable minerals, congressionally proposed safety

requirements for mines which may restrict the mineability of some resources, and the long-term change in rural Utah from a resource-based to a tourism-based economy.

### **2008 Outlook**

The overall value of mineral production in Utah for 2008 is expected to be higher than the 2007 value, as projected base-metal and precious-metal production statewide will be moderately higher and metal prices are expected to remain high as well. Industrial-mineral production is expected to increase in 2008, although commodity price increases or decreases could vary widely. However, industrial-mineral production could be adversely affected if the housing and credit markets worsen regionally. Kennecott's Barneys Canyon gold mine will close its leach pads in mid-2008, after 19 years of production. Coal production is expected to increase by about 1.6 million tons in 2008; coal prices are also projected to increase. Several new coal mines are being planned and one new mine is being permitted.

The currently high uranium price that averaged about \$100/pound in 2007 (versus a low of about \$8/pound in 2000-2001) has rejuvenated uranium exploration and development activity in the Colorado Plateau province of Southeastern Utah. There has also been a large increase in the number of federal mining claims being staked, particularly in San Juan, Emery, Garfield, and Grand counties. Increased interest in uranium led to the re-opening of one uranium mine in 2007. Several other uranium mines and the Shootaring Canyon mill near Tropic are also being rehabilitated and re-permitted. Increased interest in tar sand and oil shale may lead to a significant expansion of Utah's energy resources within the next 10 to 15 years.

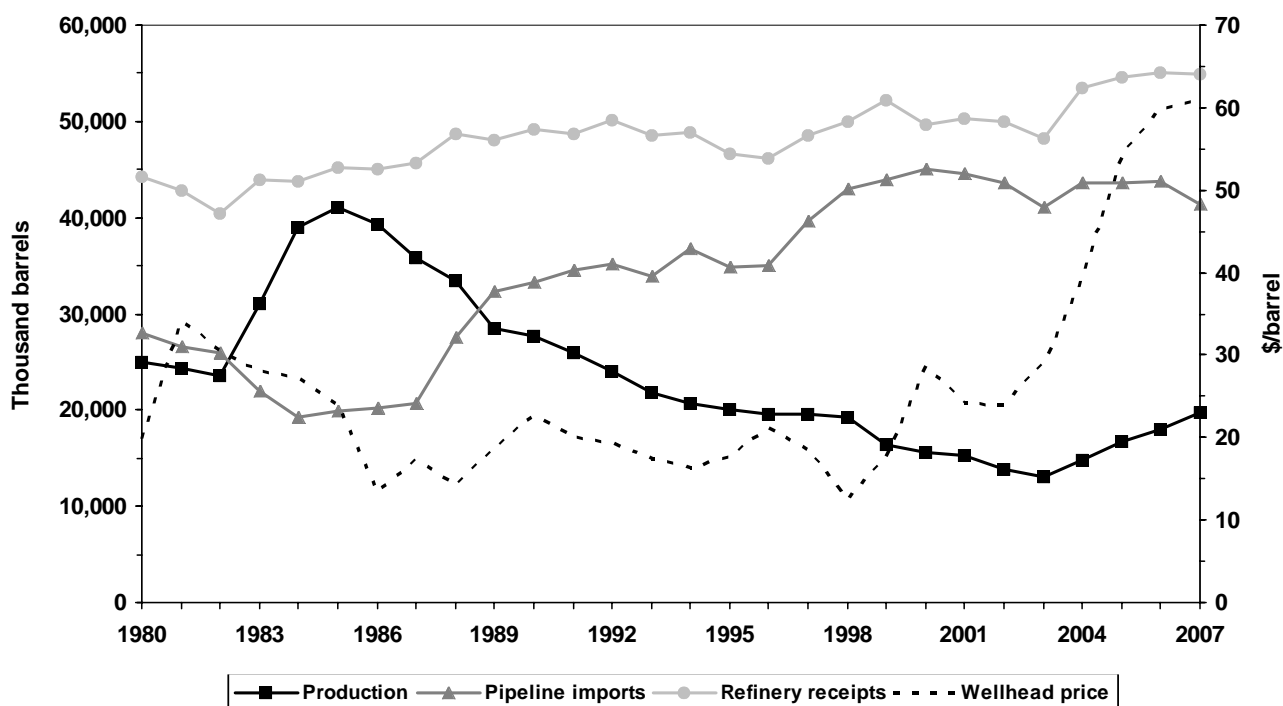
The number of exploration NOIs approved in 2007 increased for the third year in a row, and the UGS anticipates that the increase in both energy (coal and uranium) and metal prices will have a positive effect on exploration over the next several years.

### **Conclusions**

The value of Utah's energy and mineral production increased to a near record high in 2007 due to significant increases in base- and precious-metal prices and a substantial increase in crude oil prices and production. Although the number of producing mines statewide appears to be decreasing over the long term, the overall level of mineral exploration increased during 2006 and 2007 to levels not seen since the early 1990s. Prices for coal, most industrial minerals, and all metals produced in Utah were higher in 2007. The UGS anticipates that Utah's nonfuel mineral valuation will be moderately higher again in 2008, with projected increases in precious-metal and base-metal production, most industrial minerals, and energy minerals. Coal prices, which generally had been declining since the

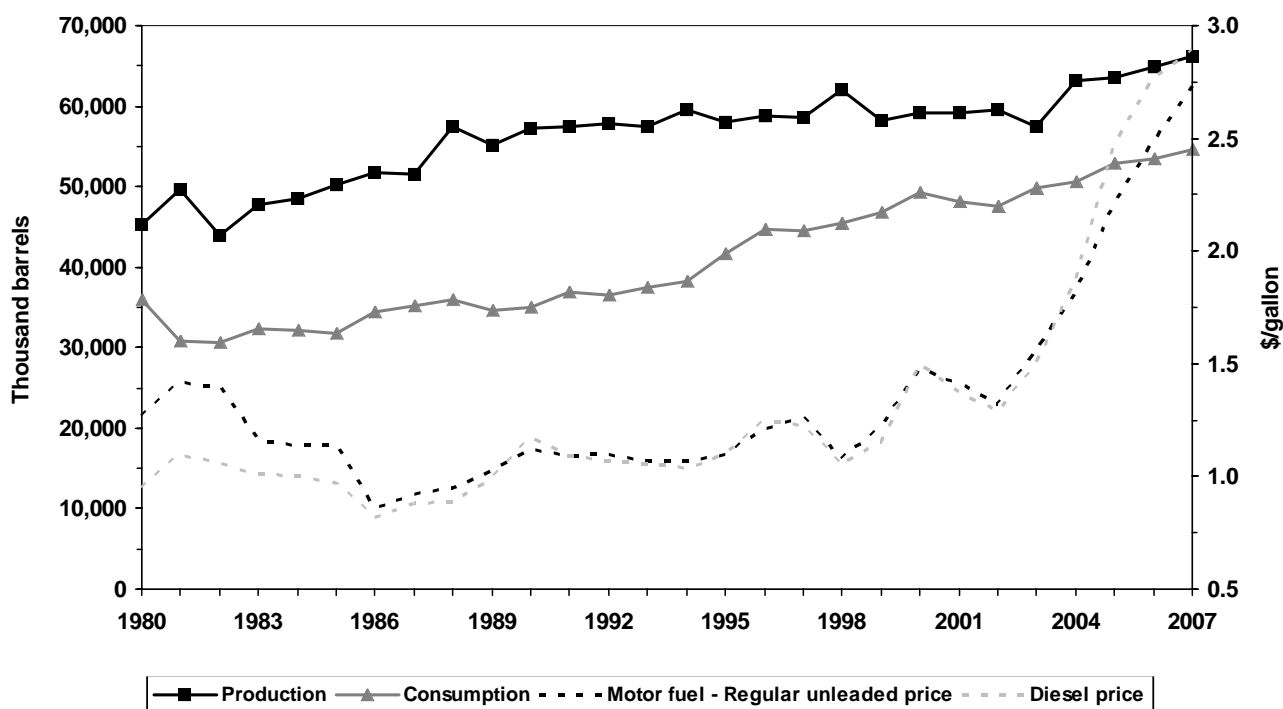
mid-1980s, have increased each year beginning in 2005 and are projected to increase again in 2008. Utah ranked fourth in the nation in the value of nonfuel mineral production and 14th in coal production in 2006. The nonfuel ranking will likely not change although the coal ranking could drop because of lower coal production. The resurgence of uranium exploration and the re-permitting of several mines will add to the value of the energy minerals sector of the industry, and tar sand and oil shale development may add significantly to the value of energy mineral production in future years.

Figure 71  
Utah's Crude Oil Production, Pipeline Imports, and Refinery Receipts Plotted with Wellhead Prices



Source: Utah Geological Survey, Utah Division of Oil, Gas, and Mining, U.S. Energy Information Administration

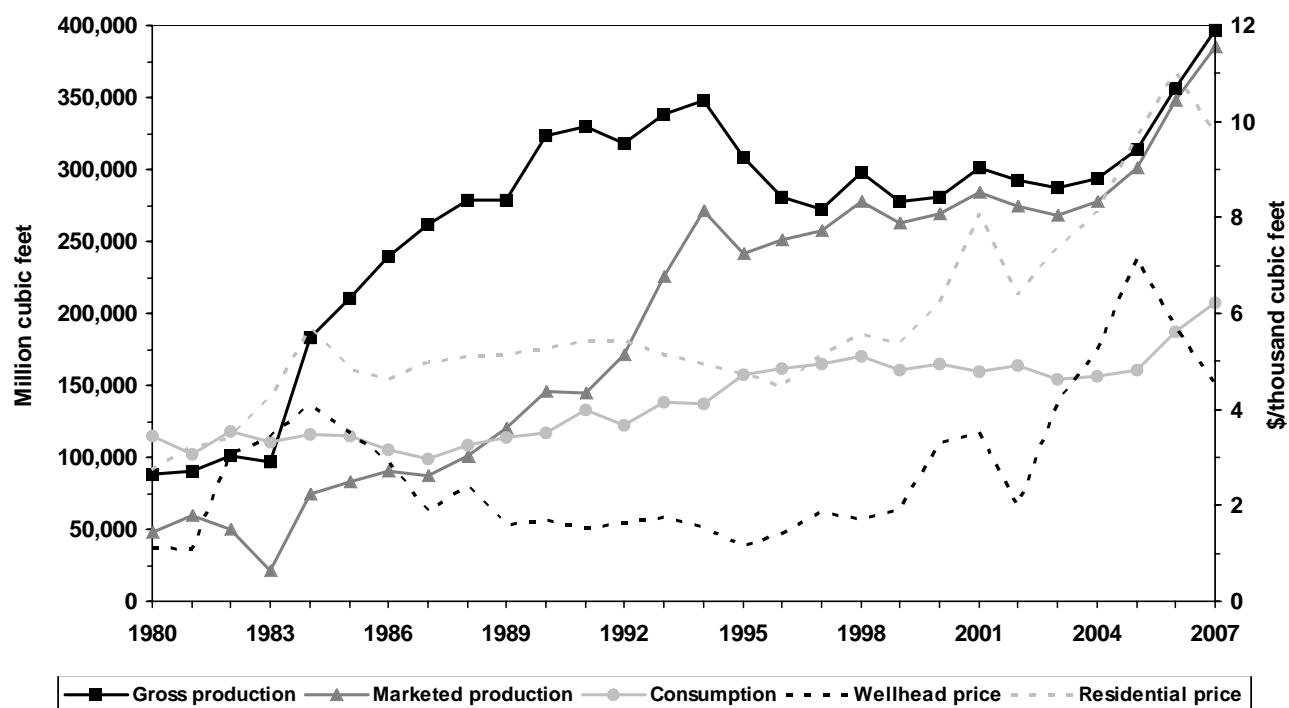
Figure 72  
Utah's Petroleum Product Production and Consumption Plotted with Motor Gasoline and Diesel Prices



Source: Utah Geological Survey, U.S. Energy Information Administration

Figure 73

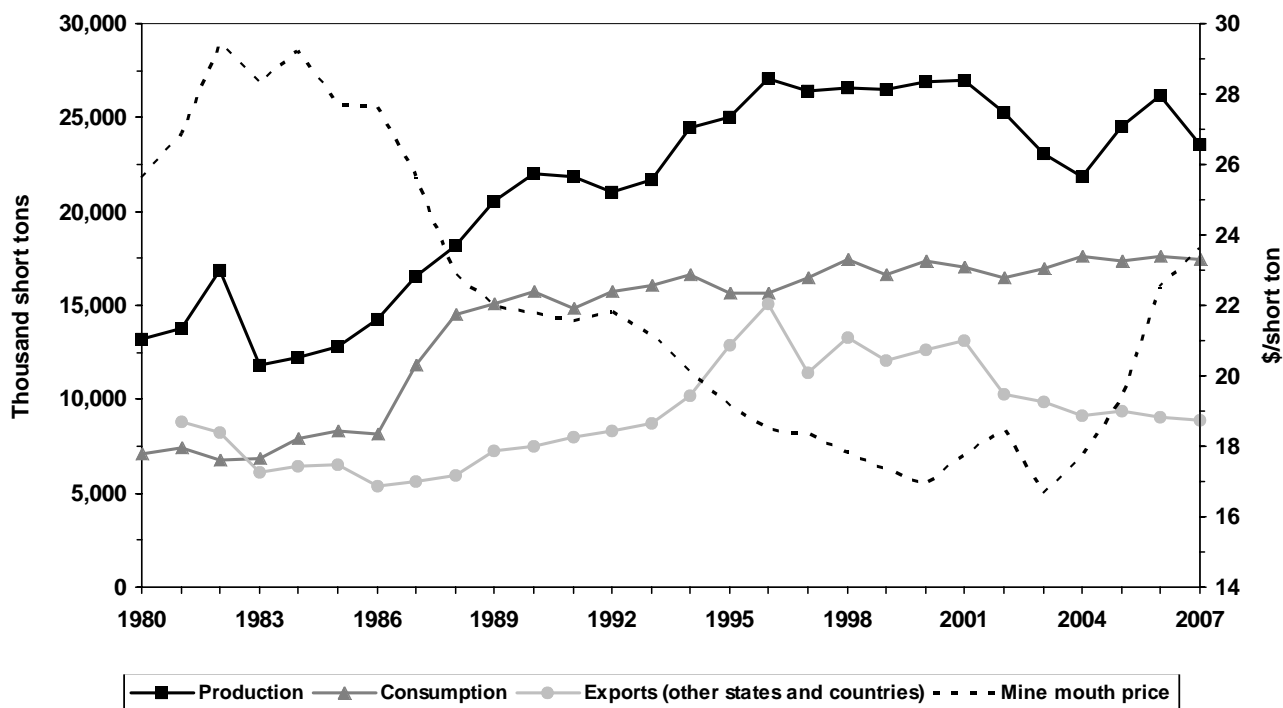
Utah's Natural Gas Production and Consumption Plotted with Wellhead and Residential Prices



Source: Utah Geological Survey, Utah Division of Oil, Gas, and Mining, U.S. Energy Information Administration

Figure 74

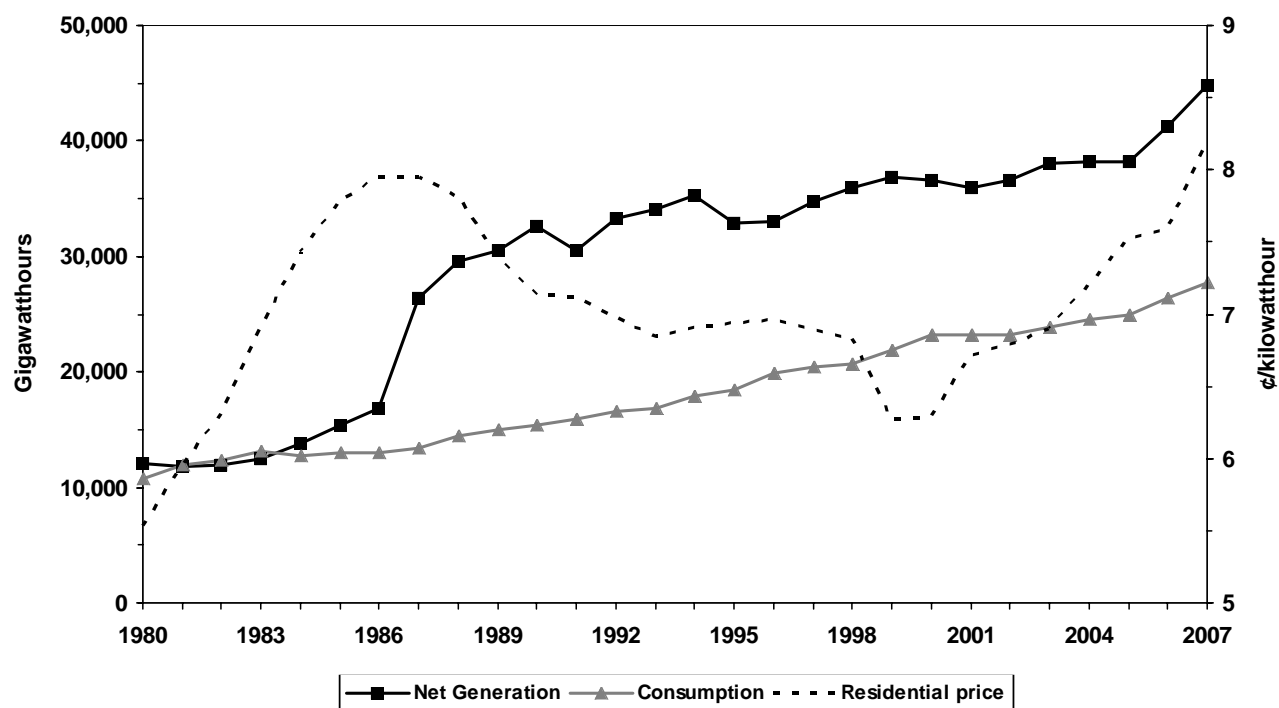
Utah's Coal Production, Consumption, and Exports Plotted with Mine Mouth Prices



Source: Utah Geological Survey, U.S. Energy Information Administration

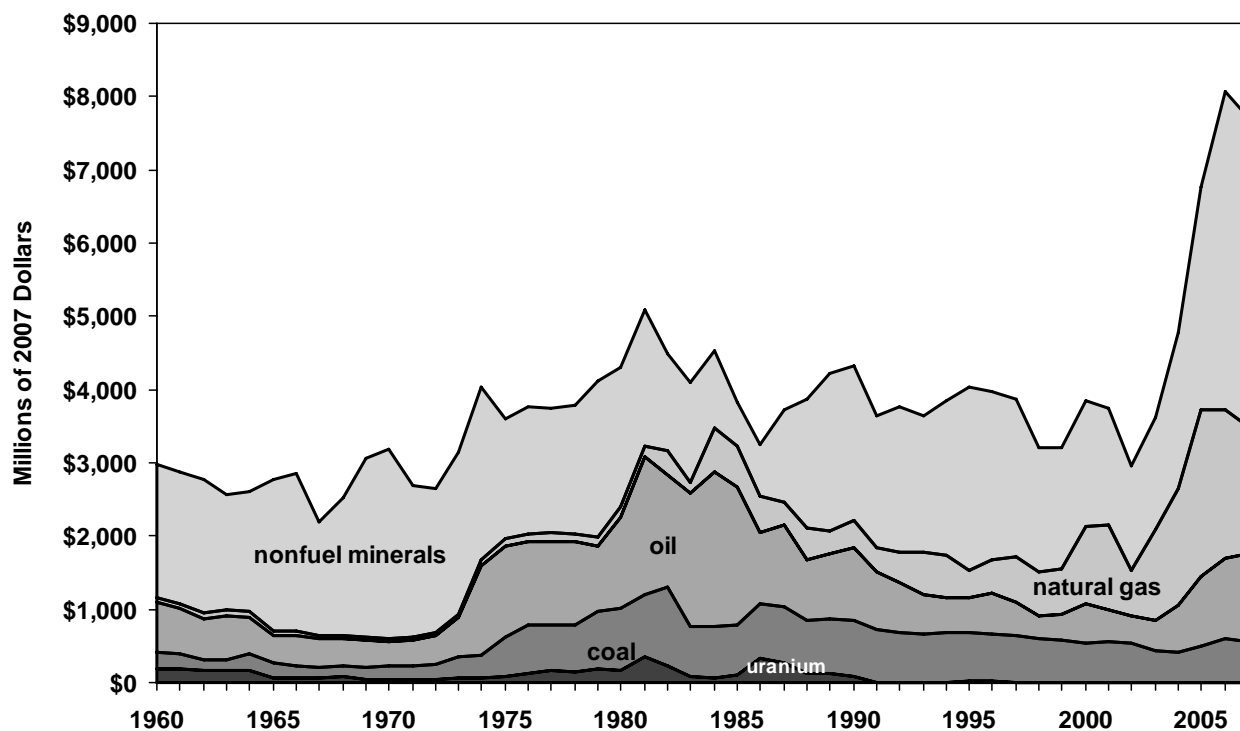


Figure 75  
Utah's Electricity Net Generation and Consumption Plotted with End-Use Residential Prices



Source: Utah Geological Survey, U.S. Energy Information Administration

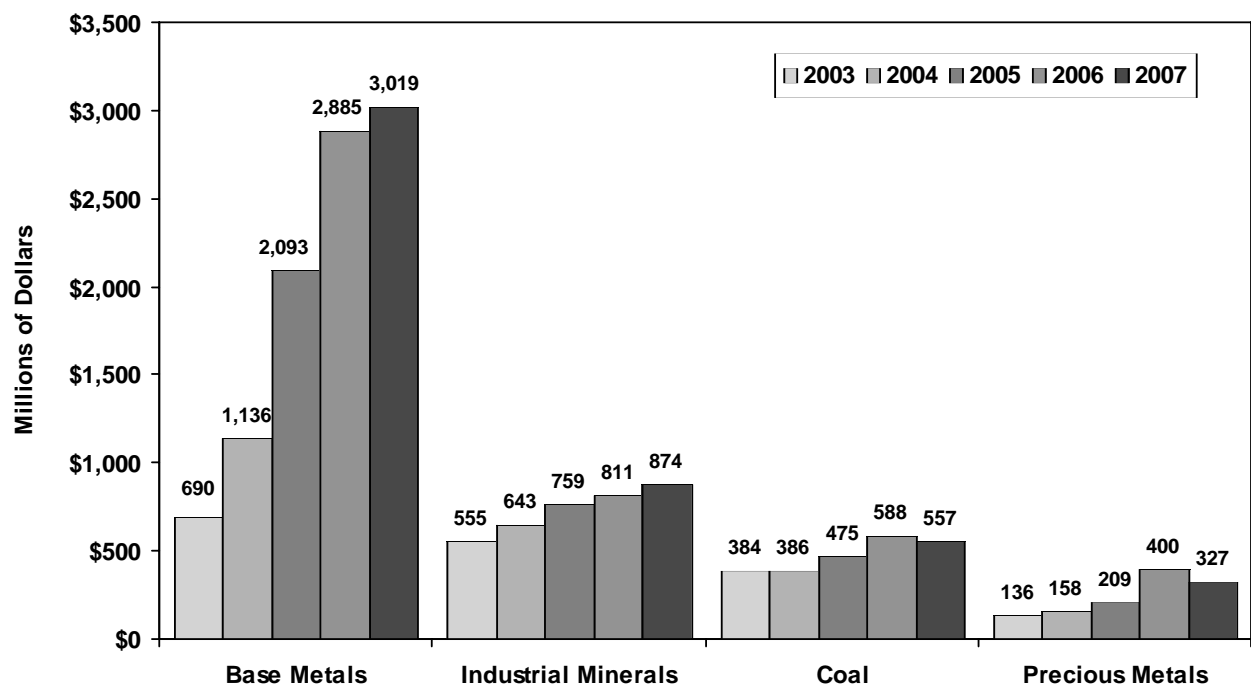
Figure 76  
Total Annual Value of Utah's Energy and Mineral Production, Inflation Adjusted to 2007 Dollars



Source: Utah Geological Survey

Figure 77

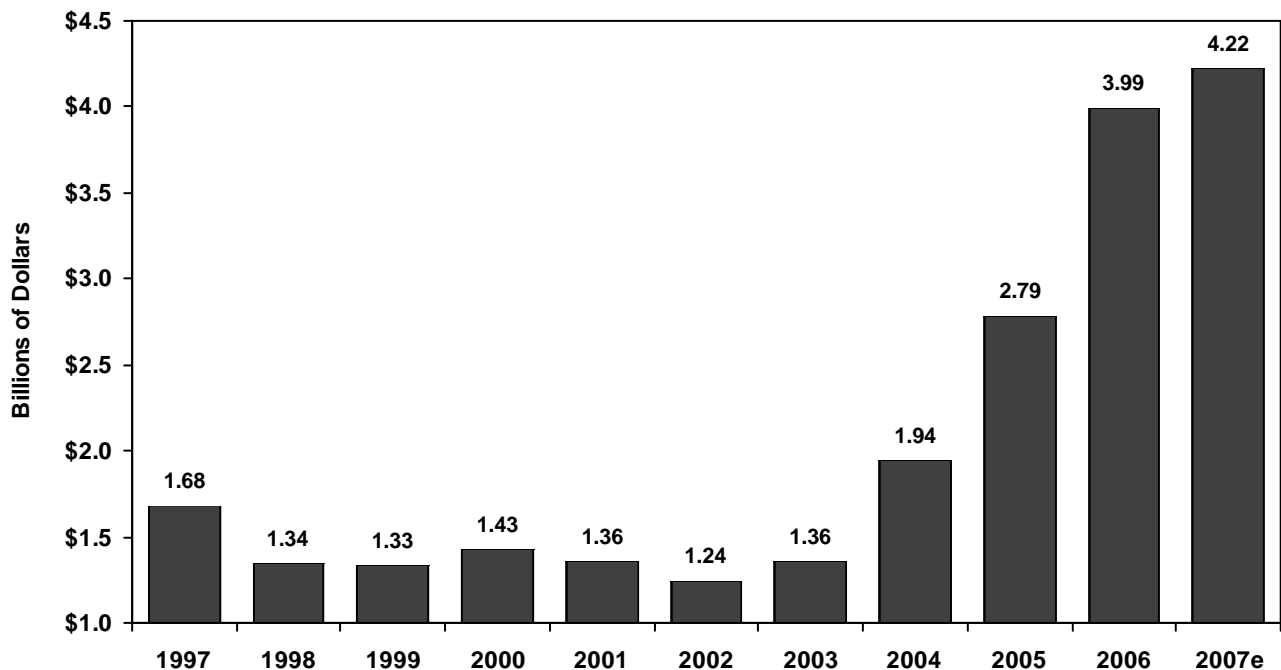
Value of Utah's Annual Mineral Production in Nominal Dollars (Excluding Oil and Gas)



Source: Utah Geological Survey

Figure 78

Total Annual Value of Utah's Nonfuel Mineral Production



e = estimate

Source: U.S. Geological Survey; estimate by Utah Geological Survey

Table 94

## Supply, Disposition, Price, and Value of Crude Oil in Utah

Year	Supply*				Disposition				Prices	Value
	Utah Field Production	Colorado Imports	Wyoming Imports	Canadian Imports	Utah Crude Exports**	Refinery Receipts	Refinery Inputs	Refinery Beginning Stocks	Wellhead	Value of Utah Crude Oil
	Thousand barrels				Thousand barrels				\$/barrel	Million \$
1980	24,979	15,846	12,233	0	8,232	44,291	44,421	665	\$19.79	\$494.3
1981	24,309	14,931	11,724	0	7,866	42,876	43,007	762	34.14	829.9
1982	23,595	13,911	12,033	0	7,826	40,372	40,368	593	30.50	719.7
1983	31,045	14,696	7,283	0	8,316	43,901	43,844	632	28.12	873.0
1984	38,965	13,045	6,195	0	13,616	43,745	43,544	606	27.21	1,060.2
1985	41,080	13,107	6,827	0	14,597	45,224	45,357	695	23.98	985.1
1986	39,243	12,567	7,574	0	15,721	45,086	45,034	559	13.33	523.1
1987	35,829	13,246	7,454	0	12,137	45,654	45,668	613	17.22	617.0
1988	33,365	12,783	14,739	0	8,411	48,690	48,604	599	14.24	475.1
1989	28,504	13,861	18,380	0	6,179	47,989	47,948	626	18.63	531.0
1990	27,705	14,494	18,844	0	7,725	49,104	48,977	656	22.61	626.4
1991	25,928	14,423	20,113	0	8,961	48,647	48,852	749	19.99	518.3
1992	24,074	13,262	21,949	0	6,901	50,079	49,776	513	19.39	466.8
1993	21,826	11,575	22,279	0	7,417	48,554	48,307	645	17.48	381.5
1994	20,668	10,480	26,227	0	7,195	48,802	48,486	691	16.38	338.5
1995	19,976	9,929	24,923	60	7,020	46,641	46,634	806	17.71	353.8
1996	19,529	9,857	24,297	783	7,117	46,126	46,265	768	21.10	412.1
1997	19,593	8,565	28,162	2,858	7,349	48,492	48,477	633	18.57	363.8
1998	19,218	8,161	28,779	6,097	7,670	50,017	49,476	613	12.52	240.6
1999	16,362	7,335	28,461	8,067	7,128	52,271	50,556	704	17.69	289.4
2000	15,609	7,163	26,367	11,528	6,565	49,716	49,999	786	28.53	445.3
2001	15,274	7,208	25,100	12,188	5,835	50,310	50,143	457	24.09	367.9
2002	13,771	7,141	25,455	10,966	5,526	49,962	49,987	591	23.87	328.7
2003	13,097	6,964	24,152	9,966	4,867	48,267	48,284	547	28.88	378.3
2004	14,744	7,559	22,911	13,206	4,427	53,400	53,180	532	39.35	580.2
2005	16,675	8,214	24,372	11,055	4,261	54,513	54,544	767	53.98	900.1
2006	17,926	9,355	23,256	11,109	4,076	55,119	55,192	728	59.80	1,072.0
2007e	19,700	10,863	21,522	8,942	3,800	54,893	54,874	662	61.10	1,203.7

e = estimate

\*Out-of-state imports only include pipeline shipments; minor imports may arrive by truck. Also, there may be additional minor imports from other states.

\*\*Estimated

Note: Prices and values are in nominal dollars.

Source: Utah Geological Survey; Utah Division of Oil, Gas and Mining; U.S. Energy Information Administration

Table 95

## Supply, Disposition, and Select Prices of Petroleum Products in Utah

Year	Supply			Consumption by Product					Exports	Prices	
	Refined in Utah	Refinery Beginning Stocks	Refined Product Pipeline Imports*	Motor Gasoline	Jet Fuel	Distillate Fuel	All Other	Total	Pipeline Exports to Other States*	Motor Fuel - Regular Unleaded	Diesel
	Thousand barrels			Thousand barrels					Thousand barrels	\$/gallon	
1980	45,340	3,202	6,427	15,534	2,637	8,401	9,411	35,983	22,136	\$1.27	\$0.95
1981	49,622	3,376	7,401	15,548	2,424	7,098	5,742	30,812	23,630	1.42	1.10
1982	44,011	2,979	8,933	15,793	2,801	6,438	5,531	30,563	22,119	1.40	1.06
1983	47,663	3,153	6,943	15,954	3,284	6,387	6,691	32,316	25,298	1.16	1.01
1984	48,493	2,842	8,215	16,151	3,413	6,107	6,458	32,129	24,121	1.14	1.00
1985	50,188	2,989	8,030	16,240	3,808	5,715	6,046	31,809	23,365	1.14	0.97
1986	51,822	2,803	8,766	17,541	4,335	6,978	5,552	34,406	20,027	0.86	0.82
1987	51,519	2,661	8,695	17,623	4,969	6,507	6,073	35,172	20,359	0.92	0.88
1988	57,354	2,306	8,926	18,148	4,977	7,060	5,786	35,971	22,031	0.95	0.89
1989	55,184	2,685	9,550	17,311	5,095	5,917	6,371	34,694	21,409	1.02	0.99
1990	57,349	3,000	10,647	16,724	5,281	7,162	5,915	35,082	21,419	1.12	1.17
1991	57,446	2,758	11,459	17,395	5,917	7,038	6,583	36,933	21,918	1.09	1.09
1992	57,786	2,746	10,534	17,905	5,607	7,286	5,726	36,524	21,087	1.10	1.07
1993	57,503	2,840	10,707	18,837	5,518	7,422	5,645	37,422	19,539	1.07	1.06
1994	59,458	3,173	11,555	19,433	5,270	7,653	5,919	38,275	21,326	1.07	1.04
1995	57,974	2,907	12,289	20,771	5,658	8,469	6,820	41,718	20,512	1.10	1.10
1996	58,852	3,253	12,692	21,170	6,303	8,746	8,409	44,628	20,512	1.21	1.25
1997	58,677	2,640	12,949	22,024	6,277	9,976	6,249	44,526	22,444	1.26	1.23
1998	62,012	2,908	12,842	22,735	6,373	10,398	5,940	45,446	22,474	1.08	1.05
1999	58,201	2,780	14,509	23,141	7,443	9,793	6,429	46,806	22,887	1.22	1.15
2000	59,125	2,426	14,568	23,895	7,701	10,629	6,954	49,179	22,811	1.48	1.50
2001	59,094	2,306	15,764	22,993	6,880	11,236	7,058	48,167	23,937	1.41	1.37
2002	59,514	2,739	16,848	24,158	6,416	11,482	5,551	47,607	24,082	1.32	1.29
2003	57,511	2,846	16,515	24,325	6,758	11,731	7,083	49,897	22,729	1.56	1.50
2004	63,071	2,599	18,486	24,744	7,137	12,264	6,480	50,625	24,475	1.82	1.88
2005	63,487	2,806	20,258	24,677	7,394	13,717	7,153	52,941	24,482	2.21	2.48
2006**	64,806	2,587	18,976	24,922	7,440	13,792	7,220	53,374	23,321	2.49	2.77
2007e	66,159	2,924	16,171	25,833	7,121	14,295	7,392	54,641	22,549	2.73	2.89

e = estimate

\*Amounts shipped by truck are unknown

\*\*Consumption is estimated

Note: Prices are in nominal dollars.

Source: Utah Geological Survey, U.S. Energy Information Administration

Table 96  
Supply, Disposition, Prices, and Value of Natural Gas in Utah

Year	Supply			Consumption by End Use							Prices				Value	
	Gross Production	Marketed Production	Actual Sales	Residential	Commercial	Vehicle Fuel	Industrial	Electric Utilities	Lease & Plant	Pipeline	Total	Wellhead	End-Use Residential	End-Use Commercial	End-Use Industrial	Value of Marketed Production Million \$
													\$/thousand cubic feet			
1980	87,766	47,857	na	45,735	12,234	0	43,545	5,133	7,594	851	115,092	\$1.12	\$2.74	\$5.59	\$2.26	\$53.6
1981	90,936	59,120	na	43,497	11,635	0	42,779	3,097	511	721	102,240	1.10	3.23	5.35	2.58	65.0
1982	100,628	49,995	na	53,482	14,306	0	39,804	3,023	5,965	1,126	117,706	3.06	3.41	3.43	2.45	153.0
1983	96,933	20,925	na	49,645	13,279	0	40,246	1,259	4,538	1,218	110,185	3.40	4.26	4.32	3.15	71.1
1984	183,062	74,698	na	49,869	13,339	0	42,709	271	8,375	1,015	115,578	4.08	5.68	4.96	3.52	304.8
1985	210,267	83,405	na	53,043	14,189	0	37,448	235	9,001	1,201	115,117	3.52	4.86	4.91	3.23	293.6
1986	239,259	90,013	na	49,144	13,146	0	28,264	230	13,289	1,102	105,175	2.90	4.64	4.73	3.00	261.0
1987	262,084	87,158	na	41,536	14,811	0	23,884	263	17,671	822	98,987	1.88	4.97	4.98	3.20	163.9
1988	278,578	101,372	na	42,241	17,911	0	30,354	196	16,889	1,362	108,953	2.39	5.11	4.08	3.10	242.3
1989	278,321	120,089	na	45,168	16,522	0	33,963	636	16,211	1,037	113,537	1.58	5.14	4.16	3.30	189.7
1990	323,028	145,875	63,336	43,424	16,220	1	35,502	907	19,719	875	116,648	1.70	5.28	4.30	3.62	248.0
1991	329,464	144,817	65,288	50,572	19,276	6	43,120	5,190	13,738	864	132,766	1.54	5.44	4.50	3.69	223.0
1992	317,763	171,293	94,725	44,701	16,584	150	40,878	6,576	12,611	1,284	122,785	1.63	5.44	4.40	3.91	279.2
1993	338,276	225,401	137,864	51,779	22,588	188	42,300	6,305	12,526	2,513	138,199	1.77	5.13	4.06	3.67	399.0
1994	348,140	270,858	160,967	48,922	26,501	201	36,618	8,900	13,273	2,807	137,222	1.54	4.96	3.84	2.74	417.1
1995	308,695	241,290	164,059	48,975	26,825	286	42,335	8,707	27,012	2,831	156,971	1.15	4.74	3.64	2.34	277.5
1996	280,439	250,767	179,943	54,344	29,543	378	42,213	4,087	27,119	3,601	161,285	1.39	4.47	3.38	2.10	348.6
1997	272,554	257,139	183,427	58,108	31,129	273	44,162	4,079	24,619	2,935	165,305	1.86	5.13	3.92	2.55	478.3
1998	297,503	277,340	201,416	56,843	30,955	636	45,501	5,945	27,466	2,788	170,134	1.73	5.57	4.35	3.00	479.8
1999	277,494	262,614	205,036	55,474	30,361	889	40,858	6,478	23,810	2,561	160,431	1.93	5.37	4.13	2.94	506.8
2000	281,170	269,285	225,958	55,626	31,282	848	39,378	10,544	24,670	2,674	165,023	3.28	6.20	4.92	3.93	883.3
2001	300,976	283,913	247,056	55,008	30,917	474	33,584	15,141	20,014	4,161	159,299	3.52	8.09	6.78	5.29	999.4
2002	293,030	274,739	247,561	59,398	33,501	482	26,879	15,439	21,697	5,984	163,379	1.99	6.39	5.20	3.91	546.7
2003	287,141	268,058	242,234	54,632	30,994	589	25,200	14,484	20,879	7,347	154,125	4.11	7.33	5.95	5.04	1,101.7
2004	293,736	277,969	251,841	60,527	31,156	661	26,674	9,423	19,172	8,278	155,891	5.24	8.12	6.75	5.90	1,456.6
2005	313,475	301,223	275,630	58,044	34,447	187	25,370	12,239	21,130	8,859	160,276	7.16	9.71	8.23	7.33	2,156.8
2006	356,515	348,040	318,800	60,017	34,051	204	29,076	28,953	24,080	11,156	187,537	5.70	11.02	9.61	8.02	1,983.8
2007e	396,800	384,896	354,200	61,300	34,800	230	31,600	42,400	25,000	9,000	204,330	4.50	9.73	8.05	6.28	1,732.0

e = estimate

na = not available

Note: Prices and values are in nominal dollars.

Source: Utah Geological Survey; Utah Division of Oil, Gas and Mining; U.S. Energy Information Administration

Table 97  
Supply, Disposition, Price, and Value of Coal in Utah

Year	Supply		Distribution		Consumption by End Use					Exports		Prices		Value
	Production	Imports	Total Distribution of Utah Coal	Residential & Commercial	Coke Plants	Other Industrial	Electric Utilities	Total	To Other U.S. States	To Canada and/or Overseas	Mine mouth	End-Use Electric Utilities	Value of Utah Coal	
	Thousand short tons	Thousand short tons	Thousand short tons						Thousand short tons	Thousand short tons	\$/short ton		Million \$	
1980	13,236	1,214	13,014	237	1,473	501	4,895	7,106	na	na	\$25.63	\$26.06	\$339.2	
1981	13,808	1,136	14,550	196	1,477	804	4,956	7,432	5,292	3,472	26.87	28.99	371.0	
1982	16,912	797	15,437	177	845	818	4,947	6,787	6,084	2,177	29.42	32.59	497.6	
1983	11,829	937	12,157	191	831	627	5,223	6,873	4,787	1,346	28.32	30.96	335.0	
1984	12,259	1,539	12,006	259	1,326	608	5,712	7,905	5,583	849	29.20	30.65	358.0	
1985	12,831	1,580	14,384	252	1,254	472	6,325	8,303	5,924	625	27.69	32.34	355.3	
1986	14,269	1,145	13,268	191	785	380	6,756	8,112	4,815	551	27.64	32.33	394.4	
1987	16,521	1,165	16,989	124	0	507	11,175	11,807	5,078	555	25.67	29.09	424.1	
1988	18,164	2,448	18,244	196	1,176	597	12,544	14,513	4,881	1,044	22.85	29.07	415.0	
1989	20,517	2,367	20,289	231	1,178	686	12,949	15,044	5,108	2,175	22.01	28.46	451.6	
1990	22,012	2,137	21,680	267	1,231	676	13,563	15,738	5,759	1,708	21.78	26.84	479.4	
1991	21,875	2,007	21,673	305	1,192	508	12,829	14,834	5,842	2,112	21.56	27.33	471.6	
1992	21,015	2,155	21,339	223	1,114	525	13,857	15,719	6,087	2,245	21.83	27.56	458.8	
1993	21,723	2,100	21,935	121	1,005	727	14,210	16,063	6,194	2,567	21.17	27.15	459.9	
1994	24,422	2,588	23,441	105	1,007	835	14,656	16,603	7,471	2,717	20.07	25.76	490.1	
1995	25,051	1,841	25,443	77	990	915	13,693	15,675	9,037	3,811	19.11	24.93	478.7	
1996	27,071	1,925	27,816	94	1,047	512	13,963	15,615	9,648	5,468	18.50	24.38	500.8	
1997	26,428	2,615	25,407	123	1,020	709	14,654	16,507	7,862	3,513	18.34	24.93	484.7	
1998	26,600	2,715	26,974	113	971	1,304	15,094	17,482	10,535	2,735	17.83	25.62	474.3	
1999	26,491	2,159	26,180	114	741	744	15,011	16,611	9,514	2,567	17.36	23.62	459.9	
2000	26,920	2,467	27,629	59	984	1,166	15,164	17,373	9,672	2,960	16.93	23.23	455.8	
2001	27,024	2,676	26,798	60	806	1,235	14,906	17,007	10,728	2,404	17.76	25.55	479.9	
2002	25,299	2,090	24,378	198	0	592	15,644	16,434	9,387	875	18.47	21.95	467.3	
2003	23,069	2,036	23,699	61	0	611	16,302	16,974	9,673	222	16.64	21.63	383.9	
2004	21,818	3,206	22,812	213	0	795	16,606	17,614	8,828	295	17.70	24.94	386.2	
2005	24,556	2,786	24,740	45	0	800	16,484	17,329	9,181	212	19.34	25.07	474.9	
2006	26,131	1,928	24,840	58	0	871	16,647	17,576	8,985	34	22.51	27.90	588.2	
2007e	23,600	2,007	24,000	49	0	871	16,543	17,463	8,854	0	23.62	29.50	557.4	

e = estimate

na = not available

Note: Prices and values are in nominal dollars.

Source: Utah Geological Survey, U.S. Energy Information Administration

Table 98  
Supply, Disposition, and Price of Electricity in Utah

Year	Net Generation by Fuel Type						Consumption by End Use				Prices by End Use				
	Coal	Petroleum	Natural Gas	Hydro	Geothermal	Other*	Total	Gigawatt hours			Total	¢/kwhr atthour			
								Residential	Commercial	Industrial		Residential	Commercial	Industrial	All Sectors
1980	10,870	63	358	821	0	0	12,112	3,116	3,141	4,448	10,705	5.5	4.3	3.3	4.3
1981	10,869	40	230	623	0	0	11,762	3,436	2,999	5,451	11,886	6.0	5.0	3.7	4.7
1982	10,635	29	203	1,024	0	0	11,891	3,785	3,207	5,399	12,391	6.3	5.7	4.2	5.2
1983	10,921	40	69	1,394	0	0	12,424	3,804	3,350	6,040	13,194	6.9	6.3	4.4	5.6
1984	12,321	30	8	1,391	38	0	13,788	3,856	4,269	4,592	12,717	7.4	6.5	4.6	6.0
1985	14,229	40	14	1,019	109	0	15,411	3,985	4,596	4,458	13,039	7.8	6.9	5.0	6.4
1986	15,155	74	6	1,413	171	0	16,819	3,989	4,682	4,318	12,989	8.0	7.1	5.2	6.6
1987	25,221	92	13	893	127	0	26,346	3,980	4,863	4,555	13,398	8.0	7.1	4.9	6.5
1988	28,806	59	5	593	174	0	29,637	4,151	5,035	5,321	14,507	7.8	7.0	4.6	6.2
1989	29,676	48	37	562	173	0	30,496	4,163	5,173	5,629	14,965	7.4	6.7	4.1	5.8
1990	31,523	52	146	508	152	183	32,564	4,246	5,390	5,766	15,402	7.1	6.3	3.8	5.5
1991	28,888	51	550	627	186	204	30,506	4,460	5,571	5,876	15,907	7.1	6.1	3.9	5.5
1992	31,553	34	631	602	233	231	33,284	4,505	5,850	6,212	16,567	7.0	6.0	3.7	5.3
1993	32,126	37	606	860	187	281	34,097	4,726	5,920	6,221	16,867	6.9	6.0	3.8	5.3
1994	33,131	33	807	750	233	281	35,235	5,009	6,340	6,498	17,847	6.9	5.9	3.8	5.4
1995	30,611	36	791	969	168	261	32,836	5,041	6,462	6,957	18,460	6.9	5.9	3.7	5.3
1996	31,101	47	324	1,049	223	239	32,983	5,481	6,717	7,660	19,858	7.0	5.9	3.7	5.3
1997	32,544	47	328	1,344	204	281	34,748	5,661	7,285	7,430	20,376	6.9	5.7	3.5	5.2
1998	33,588	35	528	1,315	195	284	35,945	5,756	7,433	7,511	20,700	6.8	5.7	3.5	5.2
1999	34,534	31	610	1,255	186	199	36,815	6,236	8,075	7,568	21,879	6.3	5.3	3.4	4.9
2000	34,491	58	890	746	187	268	36,640	6,514	8,754	7,917	23,185	6.3	5.2	3.4	4.8
2001	33,679	58	1,446	508	185	10	35,886	6,693	9,113	7,411	23,217	6.7	5.6	3.5	5.2
2002	34,488	54	1,380	458	218	10	36,608	6,938	9,310	7,019	23,267	6.8	5.6	3.8	5.4
2003	35,979	33	1,383	421	198	10	38,024	7,166	9,048	7,646	23,860	6.9	5.6	3.8	5.4
2004	36,618	33	910	450	195	6	38,212	7,325	9,371	7,816	24,512	7.2	5.9	4.0	5.7
2005	35,970	41	1,178	784	185	7	38,165	7,567	9,444	7,989	25,000	7.5	6.1	4.2	5.9
2006	36,856	62	3,389	747	191	18	41,263	8,232	9,778	8,356	26,366	7.6	6.2	4.2	6.0
2007e	37,100	50	6,783	713	190	20	44,856	8,672	10,358	8,716	27,746	8.2	6.5	4.4	6.4

e = estimate

\*Includes landfill gas, municipal solid waste, and other manufactured and waste gases derived from fossil fuels

Note: Prices are in nominal dollars.

Source: Utah Geological Survey, U.S. Energy Information Administration